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AEROSOLS FOR DISINSECTIZATION OF AIRCRAFT

For several years two high pressure aerosols, G-382 and G-651, have been used for the treatment of aircraft to destroy insects. The aerosols have the following composition:

G-382

	<u>Percent</u>
Pyrethrum extract - - - - - (20% pyrethrins)	5.0
DDT - - - - -	3.0
Cyclohexanone - - - - -	5.0
Lubricating oil - (SAE 30) - - - - -	2.0
Dichlorodifluoromethane — - - - - (Freon-12 or Genetron-12)	85.0

G-651

Pyrethrum extract - - - - - (20% pyrethrins)	6.0
DDT - - - - -	2.0
Aromatic petroleum derivative solvent - - (Velsicol AR60 or Socony Vacuum 544G)	8.0
Dichlorodifluoromethane - - - - - (Freon-12 or Genetron-12)	84.0

These high pressure aerosols have been available in cylinders subject to Section 78.63, specification 9 (ICC-9), and Section 78.66, specification 40 (ICC-40) of the Interstate Commerce Commission regulations. The commercially available one-pound ICC-9 aerosol containers are refillable and have a capacity of 40 cubic inches. The ICC-40 aerosol containers are nonrefillable and of the same capacity. Recently it has also become permissible to use these aerosols in larger disposable cylinders with a capacity of 55 and 75 cubic inches. These are described in Section 73.334 of the regulations under specification 4B240 ET.

The limited availability of the standard one-pound high pressure ICC-9 and ICC-40 cylinders has led to the development of lower pressure aerosol formulas which may be used in 12-ounce light weight containers as described in specification 2 P of ICC regulations Section 73.306.

The following formulas when used with any commercial aerosol valve having a delivery rate of 0.8 to 1.2 grams per second at 80° F. are substantially as effective as formulas G-382 and G-651.



G-1029

	<u>Percent</u>
Pyrethrum extract -- -- -- -- --	6.0
(20% pyrethrins)	
DDT - - - - -	2.0
Aromatic petroleum derivative solvents:	
(Velsicol AR60 or Socony Vacuum 544G) - -	6.0
(Velsicol AR50 or Socony Vacuum 544C) - -	2.0
Flurotrichloromethane - - - - -	25.2
(Freon-11 or Genetron-11)	
Dichlorodifluoromethane - - - - -	58.8
(Freon-12 or Genetron-12)	

G-1152

Pyrethrum extract - - - - -	5.0
(20% pyrethrins)	
DDT - - - - -	3.0
Cyclohexanone - - - - -	5.0
Lubricating oil (SAE 30) - - - - -	2.0
Flurotrichloromethane - - - - -	25.5
(Freon-11 or Genetron-11)	
Dichlorodifluoromethane - - - - -	59.5
(Freon-12 or Genetron-12)	

These two formulas when used in the 2 P container must withstand heating to 160° F. without evidence of leakage, distortion or other defect. This test temperature must be complied with rather than the 130° minimum test described in ICC regulations, Section 73.306, because temperatures in excess of 150° F. are frequently found in aircraft standing in the sun with the doors closed. Formulas G-1029 and G-1125 may also be used in the regular ICC-9, ICC-40, or 4B240 ET containers, but it is not permissible to use formulas G-382 and G-651 in the 2 P containers.

The approval of formulas G-1029 and G-1152 in 2 P containers does not preclude the continued use of formulas G-382 and G-651.

Labeling of the Aerosols for Disinsectization of Aircraft

The following forms of ingredient statements will comply with the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act in the labeling of the products marketed and shipped in interstate commerce. The statements are acceptable to the Pesticide Regulation Section, U. S. Department of Agriculture.

G-382

## Active Ingredients

Pyrethrins	1.0%
Dichloro Diphenyl Trichloroethane	3.0%
Cyclohexanone	5.0%
Mineral oil	6.0%

## Inert Ingredients

Dichlorodifluoromethane	85.0%
	<u>100.0%</u>

G-651

## Active Ingredients

Pyrethrins	1.2%
Dichloro Diphenyl Trichloroethane	2.0%
Aromatic Petroleum Derivative Solvent	8.0%
Petroleum distillate	4.8%

## Inert Ingredients

Dichlorodifluoromethane	84.0%
	<u>100.0%</u>

G-1029

## Active Ingredients

Pyrethrins	1.2%
Dichloro Diphenyl Trichloroethane	2.0%
Aromatic Petroleum Derivative Solvents	8.0%
Petroleum Distillate	4.8%

## Inert Ingredients

Dichlorodifluoromethane	58.8%
Trichlorofluoromethane	25.2%
	<u>100.0%</u>

G-1152

Active Ingredients

Pyrethrins	1.0%
Dichloro Diphenyl Trichloroethane	3.0%
Cyclohexanone	5.0%
Mineral oil	6.0%

Inert Ingredients

Dichlorodifluoromethane	59.5%
Trichlorofluoromethane	<u>25.5%</u>
	100.0%

Trade names like those given for the propellants and aromatic petroleum derivative solvents should not appear in the ingredient statement but there would be no objection, if desired, to their reference either as ingredient substatements or elsewhere on the labels. It will be noted that the active ingredients in pyrethrum extract are the pyrethrins and petroleum distillate. In the formulations G-382 and G-1152 that contain both lubricating oil (SAE 30) and the petroleum distillate from the pyrethrum extract, a single name, mineral oil is used, and the combined percentage of the two ingredients given. The actual names of the ingredient and not the abbreviations, like "DDT" for Dichloro Diphenyl Trichloroethane should be given.

A statement of net content (avoirdupois weight) expressed in terms of its largest unit should be given on the label.

Label should contain a caution similar to that found in Interpretation 18, Revision 1, Paragraph 32 (IV), Page 4, of the regulations for the enforcement of the Federal Insecticide, Fungicide, and Rodenticide Act.



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